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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,572	03/08/2001	Yuki Mizukawa	003510-080	5373

7590 03/12/2003

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[REDACTED] EXAMINER

SHOSHO, CALLIE E

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1714

DATE MAILED: 03/12/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/800,572	MIZUKAWA ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 12/18/02.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-18 is/are pending in the application.

    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) All    b) Some \* c) None of:  
        1. Certified copies of the priority documents have been received.  
        2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
        3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
    \* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
    a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

1. All outstanding rejection except for those described below are overcome by applicants' amendment filed 12/9/02.

In light of the new grounds of rejection as set forth below, the following action is non-final.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for substituents for R<sub>1</sub>-R<sub>6</sub> and R<sub>9</sub>-R<sub>13</sub> listed on pages 7-12 of the specification, does not reasonably provide enablement for any type of substituent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Case law holds that applicant's specification must be "commensurately enabling [regarding the scope of the claims]" *Ex Parte Kung*, 17 USPQ2d 1545, 1547 (Bd. Pat. App. Inter. 1990). Otherwise **undue experimentation** would be involved in determining how to practice and use applicant's invention. The test for undue experimentation as to whether or not all compounds within the scope of claims 1-18 can be used as claimed and whether claims 1-18

meet the test is stated in *Ex parte Forman*, 230 USPQ 546, 547 (Bd. Pat. App. Inter. 1986) and *In re Wands*, 8 USPQ2d 1400, 1404 (Fed.Cir. 1988). Upon applying this test to claims 1-18, it is believed that undue experimentation **would** be required because:

- (a) *The quantity of experimentation necessary is great* since claims 1-18 read on any type of substituent for R<sub>1</sub>-R<sub>6</sub> and R<sub>9</sub>-R<sub>13</sub> such as acylamino, ureido, phosphoryl, etc.
- (b) There is **no direction or guidance presented** for making an ink or coloring composition comprising a dye which includes any type of substituent for R<sub>1</sub>-R<sub>6</sub> and R<sub>9</sub>-R<sub>13</sub> such as acylamino, ureido, phosphoryl, etc.
- (c) There is an **absence of working examples** concerning making an ink or coloring composition comprising a dye that contains any type of substituent for R<sub>1</sub>-R<sub>6</sub> and R<sub>9</sub>-R<sub>13</sub> such as acylamino, ureido, phosphoryl, etc.

In light of the above factors, it is seen that undue experimentation would be necessary to make and use the invention of claims 1-18.

**NOTE:** If applicants were to amend claims 1, 10, and 12 to recite the specific substituents for R<sub>1</sub>-R<sub>6</sub> and R<sub>9</sub>-R<sub>13</sub> which are found on page 7, line 15-page 12, line 8, page 12, lines 13-15, page 16, lines 3-5 after the formulae, and page 25, lines 4-5 of the present specification, the examiner would withdraw the above rejection. For instance, in claim 1, line 2 after formula (I), the claim could be amended as " R<sub>3</sub>-R<sub>6</sub> each independently represents a hydrogen atom or a substituent selected from the group consisting of.....", followed by the specific substituents found in the specification as described above.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15 and 16, which each depend on claim 12, each recite the limitation "the water-based medium" in line 5 and line 4, respectively. There is insufficient antecedent basis for this limitation in the claim given that there is no disclosure of water-based medium in claim 12.

Should the dependencies of each of claims 15 and 16 be changed from "12" to "14"?

**Response to Arguments regarding 35 USC 112, 1<sup>st</sup> paragraph rejection**

6. Applicants arguments filed 12/9/02 have been fully considered but they are not persuasive.

Specifically, applicants argue that in light of the fact that the dye of formula (I) is an oil-soluble dye and in view of the extensive list of exemplary substituents set forth in the specification at pages 7-12, one skilled in the art would have been able to determine without undue experimentation the substituents capable of being used in the claimed oil-soluble dye.

However, it is noted that all the present claims now require oil-soluble dye which contains substituents R<sub>1</sub>, R<sub>3</sub>-R<sub>6</sub>, and R<sub>9</sub>-R<sub>13</sub> which each independently represent hydrogen or a substituent and R<sub>2</sub> which represents a substituent. The examiner's position remains that the

present specification while providing enablement for the substituents listed on pages 7-12 of the present specification, does not provide enablement for any type of substituent and that there would be undue experimentation involved in practicing and using applicants' invention given that the quantity of experimentation necessary to practice and use the invention is great since claims 1-18 read on any type of substituent, there is no direction or guidance for making ink or coloring composition comprising dye with any type of substituent, and there is an absence of working examples concerning making an ink or coloring composition with any type of substituent.

Applicants argue that one of ordinary skill in the art would have been able to determine the substituents required given that the dye is disclosed as oil-soluble and given the large list of substituents set forth in the present specification. However, the recitation of the phrase "substituent" in the present claims encompasses all types of substituents and although the list set forth in the specification is large, the list still does not comprise each and every type of substituent which could be used to form the dye. As presently set forth, the claimed dye can comprise any substituent including those which would impart some degree of water-solubility to the dye, which would effect not only the oil-solubility of the dye but also the choice of the other substituents. Further, given the large number of substituents present on the dye, the size and position of one substituent would effect the choice of other substituents. This would result in a great quantity of experimentation to produce the presently claimed invention. Additionally, there would be undue experimentation involved in practicing the invention given that there is no direction or guidance for making ink or coloring composition comprising dye with any type of

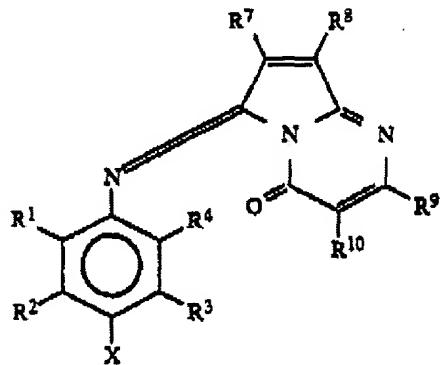
substituent as well as an absence of working examples for making ink or coloring composition comprising dye with any type of substituent.

Thus, it is the examiner's position that there would be undue experimentation to practice and use the claimed invention.

**Response to Arguments regarding 35 USC 102&103 rejections**

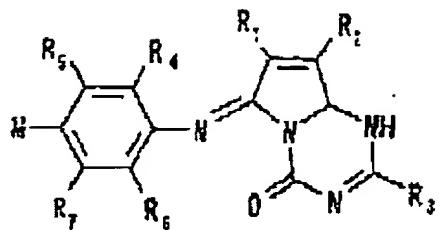
7. Applicants' arguments regarding Mikoshiba et al. (U.S. 5,344,933), JP 2000-327939, Tsutsumi et al. (U.S. 6,031,019), and JP 08269374 have been considered but they are moot in view of the discontinuation of these references against the present claims.

Specifically, Mikoshiba et al. disclose ink jet ink comprising oil-soluble dye of the formula:



which falls outside the scope of the dyes set forth in the present claims.

JP 2000-327939 disclose ink jet ink comprising oil-soluble dye of the formula:



which is identical to the presently claimed dye. However, the filing date of JP 2000-327939 lies between the filing date and the priority date of the present application as seen below:

Application No. 09/800,572 *priority date* – 3/27/00

JP 2000-327939 *filing date* – 11/28/00

Application No. 09/800,572 *filing date* – 3/8/01

Under MPEP 706.02(b), rejections based on 35 U.S.C. 102(a) can be overcome by perfecting the filing date of the priority document. Applicant's submission of certified priority document on 3/8/01 and its certified English language translation on 12/18/02 results in the perfection of the foreign priority filing date. Thus, JP 2000-327939 is no longer applicable against the present claims.

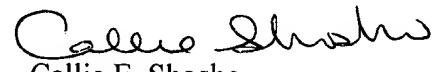
Tsutsumi et al. (U.S. 6,031,019) disclose ink jet ink comprising coloring particulates comprising oil-soluble dye and oil-soluble polymer. However, there is no disclosure or suggestion of oil-soluble dye as required in all the present claims.

JP 08269374 discloses ink jet ink comprising water, high boiling solvent, oil-soluble dye, and oil-soluble polymer, however, there is no disclosure or suggestion of oil-soluble dye as required in all the present claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Callie E. Shosho  
Examiner  
Art Unit 1714

CS  
March 10, 2003